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Customer No. 29315

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	)	Docket No.: 25824-010-401
	)	
Soheil SHAMS	)	Confirmation No.: 3936
	)	
Serial No.: 10/658,763	)	Examiner: Gregory M. Desire
	)	
Filed: September 10, 2003	)	Group Art Unit: 2625

For: AUTOMATED DNA ARRAY IMAGE SEGMENTATION AND ANALYSIS

**INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby makes of record in the above-identified application the documents listed on the attached Form PTO-1449.

Applicant has listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated. Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not an issue.

Applicant reserves the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No certification or fee is required. 37 C.F.R. 1.97(b).

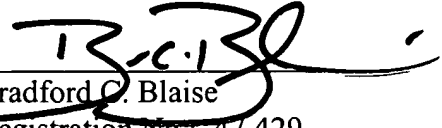
Documents 1A through 2Y were cited by or submitted to the Office in Application No. 09/992,687, filed November 16, 2001, now U.S. Patent No. 6,674,882, which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus copies of these documents are not attached. 37 C.F.R. § 1.98(d).

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449.

Respectfully submitted,

MINTZ, LEVIN, COHN, FERRIS, GLOVSKY  
and POPEO, P.C.

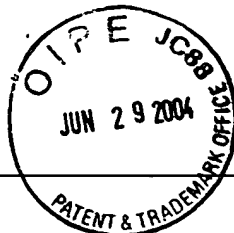
By

  
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<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>  Form PTO-1449	Docket Number	Application Number
	25824-010-401	10/658,763
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	Filing Date	Group Art Unit
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**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	1A	4,550,084	10/1985	Nelson <i>et al.</i>			
	1B	4,641,528	02/1987	Claylang, Jr. <i>et al.</i>			
	1C	5,121,320	06/0992	Aoki <i>et al.</i>			
	1D	5,273,632	12/1993	Stockham <i>et al.</i>			
	1E	5,389,792	02/1995	DiMarzio <i>et al.</i>			
	1F	5,417,923	05/1995	Bojanic <i>et al.</i>			
	1G	5,541,064	07/1996	Bacus <i>et al.</i>			
	1H	5,560,811	10/1996	Briggs <i>et al.</i>			
	1I	5,580,728	12/1996	Perlin			
	1J	5,581,631	12/03/1996	Ortyn <i>et al.</i>			
	1K	5,583,973	12/1996	DeLisi <i>et al.</i>			
	1L	5,680,514	10/1997	Shams			
	1M	5,695,937	12/1997	Kinzler <i>et al.</i>			
	1N	5,757,954	05/1998	Kuan <i>et al.</i>			
	1O	5,837,475	11/1998	Dorsel <i>et al.</i>			
	1P	5,851,769	12/1998	Gray <i>et al.</i>			
	1Q	5,853,979	12/1998	Green <i>et al.</i>			
	1R	5,865,975	02/1999	Bishop			
	1S	5,876,933	03/1999	Perlin			
	1T	5,916,747	06/1999	Gilchrist <i>et al.</i>			
	1U	5,945,284	08/1999	Livak <i>et al.</i>			
	1V	5,945,679	08/1999	Dorsel <i>et al.</i>			
	1W	5,970,164	10/19/1999	Bamberger <i>et al.</i>			

**FOREIGN PATENT DOCUMENTS**

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations	
							YES	NO

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

	1X	M. BURL, "Recognition of Visual Object Classes", <u>Jet Propulsion Laboratory</u> , V-0105, March 30, 1996, 12 pages.
	1Y	M. TAINE and A. HERMENT, "Extraction of Heart and Vessel Walls on Ultrasound Images Using Snake-Splines", <u>SPIE</u> , Volume 2434, March 1995, pages 808-816.
	1Z	M. JOLLY, S. LAKSHMANAN and A. JAIN, "Vehicle Segmentation and Classification Using Deformable Templates", <u>IEEE</u> , Volume 18, No. 3, March 1996, pages 293-305.
	1AA	Y. AMIT and A. KONG, "Graphical Templates for Model Registration", <u>IEEE</u> , Volume 18, No. 3, March 1996, pages 225-236.
	1BB	B. OLSTAD and A. TORP, "Encoding of a Priori Information in Active Contour Models", <u>IEEE</u> , Volume 18, No. 9, September 1996, pages 863-872.

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	



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	2A	5,981,190	11/1999	Israel			
	2B	5,989,835	11/1999	Dunlay <i>et al.</i>			
	2C	6,127,129	10/03/2000	Corn <i>et al.</i>			
	2D	6,185,561	02/06/2001	Balaban <i>et al.</i>			
	2E	6,226,542	05/01/2001	Reisfeld			
	2F	6,245,517	06/12/2001	Chen <i>et al.</i>			
	2G	6,251,601	06/26/2001	Bao <i>et al.</i>			
	2H	6,263,092	07/17/2001	Roehrig <i>et al.</i>			
	2I	6,301,378	10/09/2001	Karssemeijer <i>et al.</i>			
	2J	6,303,301	10/2001	Mack			
	2K	6,345,115	02/05/2002	Ramm <i>et al.</i>			
	2L	6,362,004	03/26/2002	Noblett			
	2M	6,362,832	03/26/2002	Stephan <i>et al.</i>			
	2N	6,381,058	04/30/2002	Ramm <i>et al.</i>			
	2O	2002/0052882	05/02/2002	Taylor			
	2P	6,441,973	08/27/2002	Ramm <i>et al.</i>			
	2Q	6,498,690	12/24/2002	Ramm <i>et al.</i>			
	2R	6,498,863	12/24/2002	Gaidoukevitch <i>et al.</i>			
	2S	6,537,749	03/25/2003	Kuimelis <i>et al.</i>			

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**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

	2T	A. ABRANTES and J. MARQUES, "A Class of Constrained Clustering Algorithms for Object Boundary Extraction", <u>IEEE</u> , Volume 5, No. 11, November 1996, pages 1507-1521.
	2U	A. JAIN, Y. ZHONG and S. LAKSHMANAN, "Object Matching Using Deformable Templates", <u>IEEE</u> , Volume 18, No. 3, March 1996, pages 267-278.
	2V	M. KASS, A. WITKIN and D. TERZOPOULOS, "Snakes: Active Contour Models", <u>International Journal of Computer Vision</u> , 1998, pages 321-331.
	2W	S. SHAMS, "Multiple Elastic Modules for Visual Pattern Recognition", <u>Neural Networks</u> , Volume 8, No. 9, 1995, pages 1439-1453.
	2X	D. SHU, J. NASH, M. ESHAGHIAN and K. KIM, "Straight-Line Detection on a Gated-Connection VLSI Network", <u>IEEE Comp. Soc.</u> , June 1990, pages 456-461.
	2Y	S. SHAMS, "Translation-, Rotation-, Scale-, and Distortion-Invariant Object Recognition Through Self-Organization", <u>International Journal of Neural Systems</u> , Volume 8, No. 2, April 1997, pages 173-179.

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## U.S. PATENT DOCUMENTS

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[illegible]

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	3A	Yidong CHEN <i>et al.</i> , "Ratio-Based Decisions and the Quantitative Analysis of cDNA Microarray Images", <i>Journal of Biomedical Optics</i> , Volume 2, No. 4, October 1997, pages 364-374.

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